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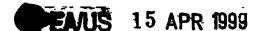
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WHAT IS CLAIMED IS:

1. - 22. (Canceled)

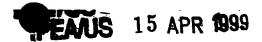
A method of killing or inhibiting growth of bacteria comprising contacting said bacteria with a peptide nucleic acid.

- The method of claim 23 wherein said peptide nucleic acid is complementary in an anti-parallel orientation to a region of ribosomal RNA of said backeria.
- The method of claim 23 wherein said peptide nucleic acid 25. is complementary in an anti-parallel orientation to a region of messenger RNA of said bacteria.
- The method of claim 25 further comprising contacting said bacteria with at least one antibiotic.
- The method of claim 23 wherein said peptide nucleic acid is from about 5 to about 40 monomer units in length.
- The method of claim 23 wherein said peptide nucleic acid is from about 6 to about 25 monomer units in length.
- The method of claim 23 wherein a portion of said peptide nucleic acid is complementary in an anti-parallel orientation with a region of ribosomal RNA of said bacteria and a further portion of said peptide nucleic acid \s/complementary in an anti-parallel orientation with a region of messenger RNA of said bacteria.
- The method of claim 29 further comprising contacting said bacteria with at least one antibiotic.



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- 31. A process for determining the function of a target gene in a bacteria comprising the steps of:
 - a) selecting a target gene within said bacteria;
 - b) providing a nucleotide sequence of said target gene;
- c) selecting and preparing one or more PNA compounds each having a region that is complementary, in an anti-parallel orientation, to a portion of said nucleotide sequence of said target gene;
- d) determining the activity of said one or more PNA compounds in a selected assay to identify active PNA compounds;
- e) contacting said bacteria with said active PNA compounds; and
- f) determining the effect of said one or more PNA compounds on said bacteria.
- 32. The process of claim 31 wherein said selected assay of step c) is and in vitro assay.
- 33. The process of claim 31 wherein said selected assay of step c) is an in vivo assay.
- 34. The process of claim 32 wherein said in vitro assay comprises contacting said one or more PNA compounds with a cell free extract containing said target gene from said bacteria.
- 35. The process of claim 31 wherein the gene product of said target gene is a polypeptide.
- 36. The process of claim 35 wherein said portion of said nucleotide sequence of said target gene comprises the start codon of an open reading frame.



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- 37. The process of claim 31 wherein the gene product of said target gene is an RNA molecule.
- 38. The process of claim 31 wherein said target gene is located on a chromosome located on an episome of said bacteria.
- 39. A method of treating a mammal suffering from a bacterial infection comprising administering one or more peptide nucleic acid compounds to said mammal.
- 40. The method of claim 39 wherein said peptide nucleic acid is complementary in an arti-parallel orientation to a region of ribosomal RNA of said bacteria.
- 41. The method of claim 39 wherein said peptide nucleic acid is complementary to a region of mRNA of said bacteria.
- 42. The method of claim 39 further comprising concurrent treatment with an antibiotic.
- 43. A method of disinfection comprising:
 selecting an object to be disinfected;
 contacting said object with peptide nucleic acid; and
 rinsing said object with a sterile liquid to remove said
 peptide nucleic acid.
- 44. The method of claim 43 wherein said peptide nucleic acid is in the form of a solution and said object is contacted with said solution over substantially all solvent accessible areas of said object.
- 45. An antibacterial pharmaceutical composition comprising one or more peptide nucleic acid compounds.

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- 46. The antibacterial pharmaceutical composition of claim 45 further comprising a pharmaceutically acceptable carrier or diluent.
- 47. The antibacterial composition of claim 45 having bacteriostatic properties.
- 48. The antibacterial composition of claim 45 having bacteriocidal properties.
- 49. The antibacterial composition of claim 45 wherein said one or more peptide nucleic acid compounds are targeted to an essential bacterial gene.
- 50. The antibacterial composition of claim 48 wherein said one or more peptide nucleic acid compounds are targeted to a bacterial gene conferring resistance to one or more antibiotic agents.
- 51. The antibacterial pharmaceutical composition of claim 49 further comprising a β -lactam antibacterial agent.
- 52. A pharmaceutical composition comprising two or more PNA compounds that inhibit the viability or growth of a bacterial species or the resistance of said bacterial species to one or more antibiotic compounds.
- 53. The pharmaceutical composition of claim 52 further comprising one or more antibiotic compounds.
- 54. A method of treating a mammal suffering from a bacterial infection comprising administering to said mammal the pharmaceutical composition of claim 53.

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